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EXAMINER	
ELPENORD, CANDAL	
ART UNIT	PAPER NUMBER
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/519,092	AUTERINEN, OTSO	
	Examiner	Art Unit	
	CANDAL ELPENORD	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 December 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *27 December 2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Arguments

1. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1-6, 8-10, 13-15, 17-20, 25-30** are rejected under 35 U.S.C. 102(b) as being anticipated by Arunachalam et al (US 6,631,122 B1).

Regarding claims 1,17, Arunachalam et al. discloses a system (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15) comprising: user equipment (fig. 3, EndSystem QoS Client 207): a resource node (fig. 3, QoS Agent 301, "QoS Agent guiding the Radio Resource Manager in allocating radio channels", recited in col. 4, lines 67 – col. 5, lines 16) to manage resource (fig. 3, QoS Agent 301, "QoS Agent guiding the Radio Resource Manager in allocating radio channels", recited in col. 4, lines 67 – col. 5, lines 16) for communication with user equipment (fig. 3, EndSystem QoS Client 207); and a managing node configured to manage traffic flow ("the resource manager determines the set of resources to be provided", recited in col. 9, lines 30-35), wherein said resource node and managing node are configured so that information determined ("parameter computation block of QoS Agent which guides the Radio Resource Manager in making call admission control decisions,, "provides feedback to

admission controller based on the parameter computation", recited in col. 5, lines 40-46) by the at least one resource node is passed between resource node and managing node ("the wireless QoS Agent resolves of the QoS mapping, it sends CoS information of the new flow to the Radio Resource Manger", recited in col. 9, lines 4-10, "the resource manager making call admission control decision, it consults with QoS agent to determine whether the requested QoS can be met", recited in col. 9, lines 35-60), said managing node selecting a parameter ("the resource manger appropriate recourses for the CoS of flow", recited in col. 9, lines 47-60, "QoS Parameters such as delay, jitter and Bit Error Rate", recited in col. 6, lines 13-18) for a new traffic flow based on said information ("CoS information of the new flow which helps the Radio Resource Manager makes a call admission decision", recited in col. 9, lines 7-10).

Regarding claim 2, Arunachalam et al. discloses a system (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15) wherein the resource node and the managing node are configured to negotiate in order to select the at least one parameter ("implementing of service mapping, which requires QoS negotiation between the wireless network and the user", recited in col. 5, lines 54- 66, "assigned of QoS to incoming packet from the mobile to the base station based on negotiation", recited in col. 6, lines 1-12).

Regarding claim 3, Arunachalam et al. discloses a system (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15) as claimed in claim 1, wherein said information comprises negotiation information ("assigned of QoS to incoming packet

from the mobile to the base station based on negotiation", recited in col. 6, lines 1-12) and said negotiation information is determined by the resource node ("the QoS agent is capable of exchanging service level agreements (SLA) with peer QoS agent to determine the QoS mapping to specific class of service", recited in col. 8, lines 47-53).

Regarding claim 4, Arunachalam et al. discloses a system (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15) as claimed in claim 3, wherein said negotiation information ("grade of service achieved through negotiation", recited in col. 5, lines 54-62) comprises at least one of the following type of traffic ("mapping of customer requirements directly to a service class", recited in col. 6, lines 31-40), the bit rate of the traffic ("mapping of a packet of new flow to the class of services (CoS)", recited in col. 7, lines 60 – col. 8, lines 6, "various classes of wireless services with specified QoS requirements", recited in col. 5, lines 26-29) and the cost ("tariff policies", recited in col. 5, lines13-15).

Regarding claim 5, Arunachalam et al. discloses a system (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15), wherein said negotiation information ("grade of service achieved through negotiation", recited in col. 5, lines 54-62) is determined for a plurality of different traffic handling classes (see, fig. 4, Delay sensitive, Delay Tolerant, Best Effort as different types of traffic classes which require specialized QoS, "various classes of wireless services with specified QoS requirements", recited in col. 5, lines 26-29).

Regarding claim 6, Arunachalam et al. discloses a system (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15), wherein said parameter ("QoS Parameters such as delay, jitter and Bit Error Rate", recited in col. 6, lines 13-18) is at least one of the following, traffic handling class ("QoS implementation-provisioning of QoS associated with a service class", recited in col. 6, lines 41-58), cost ("tariff policies", recited in col. 5, lines13-15), and target bit rate ("mapping of a packet of new flow to the class of services (CoS)", recited in col. 7, lines 60 – col. 8, lines 6, "various classes of wireless services with specified QoS requirements", recited in col. 5, lines 26-29).

Regarding claim 8, Arunachalam et al. discloses a system (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15) as claimed in claim 1, wherein the resource node comprises an access node with which said user equipment (fig. 3, EndSystem QoS Client 207): is configured to communicate ("the resource manager sends message to the mobile", recited in col. 11, lines 46-52).

Regarding claim 9, Arunachalam et al. discloses a system (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15) as claimed in claim 8, wherein access node ("wireless access node", recited in col. 7, lines 5-12) is a base station or radio network controller ("Base Station Controller", recited in col. 7, lines 5-12).

Regarding claim 10, Arunachalam et al. discloses a system (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15), wherein the managing node is

located at an edge of a network (fig. 2, QoS Manager 205 interfacing the Edge Device, fig. 3, QoS Manager that is located right at the edge).

Regarding claim 13, Arunachalam et al. discloses a system (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15), wherein said resource node is an access node ("wireless radio access node and radio access QoS management residing in the base station controller", recited in col. 7, lines 5-12).

Regarding claim 13, Arunachalam et al. disclose a system (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15), wherein the managing node further provides guiding an actual flow rate to a target flow rate ("mapping of a packet of new flow to the class of services (CoS)", recited in col. 7, lines 60 – col. 8, lines 6, "various classes of wireless services with specified QoS requirements", recited in col. 5, lines 26-29).

Regarding claim 14, Arunachalam et al. discloses a system (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15), the managing node further provides detecting a new flow ("mapping of a first packet of a new flow, where the QoS function extracts a ToS byte", recited in col. 7, lines 60 –col. 8, lines 6).

Regarding claim 15, Arunachalam et al. discloses a system (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15), wherein the resource node further

provides balancing a load between available resources ("the QoS Agent provides load balancing", recited in col. 4, lines 23-33).

Regarding claim 18, Arunachalam et al. discloses a system (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15): comprising: user equipment (fig. 3, EndSystem QoS Client 207); a managing node configured to manage traffic flow (fig. 3, QoS Agent 301, "QoS Agent guiding the Radio Resource Manager in allocating radio channels", recited in col. 4, lines 67 – col. 5, lines 16); and a resource node comprising a resource manager (fig. 3, QoS Agent 301, "QoS Agent guiding the Radio Resource Manager in allocating radio channels", recited in col. 4, lines 67 – col. 5, lines 16) configured to communicate with user equipment (fig. 3, EndSystem QoS Client 207); t, and an information passer configured to determine information ("parameter computation block of QoS Agent which guides the Radio Resource Manager in making call admission control decisions,, "provides feedback to admission controller based on the parameter computation", recited in col. 5, lines 40-46) and to pass the information to the managing node ("the wireless QoS Agent resolves of the QoS mapping, it sends CoS information of the new flow to the Radio Resource Manger", recited in col. 9, lines 4-10, "the resource manager making call admission control decision, it consults with QoS agent to determine whether the requested QoS can be met", recited in col. 9, lines 35-60).

Regarding claim 19, Arunachalam et al. discloses a system (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15) comprising; user equipment (fig. 3, EndSystem QoS Client 207); a resource node configured to resources (fig. 3, QoS Agent 301, "QoS Agent guiding the Radio Resource Manager in allocating radio channels", recited in col. 4, lines 67 – col. 5, lines 16) for communication with the user equipment (fig. 3, EndSystem QoS Client 207), and a managing node, said managing node comprising a traffic flow manager configured to manage a traffic flow ("the resource manager determines the set of resources to be provided", recited in col. 9, lines 30-35), an information receiver configured to receive information determined at the resource node ("parameter computation block of QoS Agent which guides the Radio Resource Manager in making call admission control decisions,, "provides feedback to admission controller based on the parameter computation", recited in col. 5, lines 40-46) from the resource node ("the wireless QoS Agent resolves of the QoS mapping, it sends CoS information of the new flow to the Radio Resource Manger", recited in col. 9, lines 4-10, "the resource manager making call admission control decision, it consults with QoS agent to determine whether the requested QoS can be met", recited in col. 9, lines 35-60), and a selector configured to select at least one parameter ("the resource manger appropriate recourses for the CoS of flow", recited in col. 9, lines 47-60, "QoS Parameters such as delay, jitter and Bit Error Rate", recited in col. 6, lines 13-18) for a new traffic flow based on said information ("CoS information of the new flow which helps the Radio Resource Manager makes a call admission decision", recited in col. 9,

lines 7-10).

Regarding claim 20, Arunachalam et al. discloses an apparatus (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15), comprising: a traffic flow manager configured to manage a traffic flow (fig. 3, QoS Agent 301, "QoS Agent guiding the Radio Resource Manager in allocating radio channels", recited in col. 4, lines 67 – col. 5, lines 16); an information receiver configured to receive information determined at a resource node ("parameter computation block of QoS Agent which guides the Radio Resource Manager in making call admission control decisions,, "provides feedback to admission controller based on the parameter computation", recited in col. 5, lines 40-46) from the resource node ("the wireless QoS Agent resolves of the QoS mapping, it sends CoS information of the new flow to the Radio Resource Manger", recited in col. 9, lines 4-10, "the resource manager making call admission control decision, it consults with QoS agent to determine whether the requested QoS can be met", recited in col. 9, lines 35-60); and a selector configured to select at least one parameter ("the resource manger appropriate recourses for the CoS of flow", recited in col. 9, lines 47-60, "QoS Parameters such as delay, jitter and Bit Error Rate", recited in col. 6, lines 13-18) for a new traffic flow based on said information ("CoS information of the new flow which helps the Radio Resource Manager makes a call admission decision", recited in col. 9, lines 7-10).

Regarding claim 25, Arunachalam et al. discloses an apparatus (fig. 2, fig. 3,

Communication system, recited in col. 4, lines 1-15), wherein said information comprises negotiation information ("assigned of QoS to incoming packet from the mobile to the base station based on negotiation", recited in col. 6, lines 1-12) and said negotiation information is determined by the resource node ("the QoS agent is capable of exchanging service level agreements (SLA) with peer QoS agent to determine the QoS mapping to specific class of service", recited in col. 8, lines 47-53).

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Regarding claim 26, Arunachalam et al. discloses an apparatus (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15) as claimed in claim 20, wherein said parameter ("QoS Parameters such as delay, jitter and Bit Error Rate", recited in col. 6, lines 13-18) is at least one of the following, traffic handling class ("QoS implementation-provisioning of QoS associated with a service class", recited in col. 6, lines 41-58), cost ("tariff policies", recited in col. 5, lines13-15), and target bit rate ("mapping of a packet of new flow to the class of services (CoS)", recited in col. 7, lines 60 – col. 8, lines 6, "various classes of wireless services with specified QoS requirements", recited in col. 5, lines 26-29).

Regarding claim 27, Arunachalam et al. discloses an apparatus as claimed in claim 20, wherein the resource node (fig. 3, fig. 4, Wireless QoS Agent interfacing the Radio Resource Manager which provides access to user's equipment) comprises an access node ("wireless access node", recited in col. 7, lines 5-12 which is configured to

communicate with user equipment ("the resource manager sends message to the mobile", recited in col. 11, lines 46-52).

Regarding claim 27, Arunachalam et al. discloses an apparatus (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15) as claimed in claim 27, wherein the access node ("wireless access node", recited in col. 7, lines 5-12) is a base station or radio network controller ("wireless radio access node and radio access QoS management residing in the base station controller", recited in col. 7, lines 5-12).

Regarding claim 29, Arunachalam et al. discloses an apparatus (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15), wherein said resource node is an access node (fig. 3, fig. 4, Wireless QoS Agent interfacing the Radio Resource Manager which provides access to user's equipment).

Regarding claim 30, an apparatus (fig. 2, fig. 3, Communication system, recited in col. 4, lines 1-15), wherein the resource node further provides balancing a load between available resources ("the QoS Agent provides load balancing", recited in col. 4, lines 23-33).

4. **Claims 20-29** are rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al (US 2003/0009580 A1).

Regarding claim 20, Chen et al. discloses an apparatus (fig.1, Telecommunication Network System, recited in paragraph 0027, fig. 5 to fig. 6), comprising: a traffic flow manager (fig. 2, IP Base Station Manager) configured to manage a traffic flow ("controller controlling the flow of data stream from the user's terminal", recited in paragraph 0019, fig. 2, IP Base Station Manager); an information receiver configured to receive information determined ("the radio network controller sending radio link configuration prepare message to inform the base station of ", recited in paragraph 0112) at a resource node from the resource node (fig. 6, Radio Network Controller "determines Radio Base Station QoS parameters", recited in paragraph 0111);; and a selector configured to select at least one parameter for a new traffic flow based on said information ("selecting the accessible RAB/Radio Access Bearer associated with configurable parameter", recited in paragraph 0108, additionally, Dynamic selection based on SLA QoS/service requirements", recited in paragraph 0011).

Regarding claim 21, Chen et al. discloses an apparatus (fig.1, Telecommunication Network System, recited in paragraph 0027, fig. 5 to fig. 6), comprising: a resource manager ("the radio network controller sends a radio bearer set up message to the user equipment", recited in paragraph 0116) configured to communicate with user equipment (fig. 5, Mobile Station, fig. 6, User Equipment); and an information determiner configure to determine information (fig. 6, Radio Network Controller "determines Radio Base Station QoS parameters", recited in paragraph

0111); an information passer configured to pass said information ("the radio network controller sending radio link configuration prepare message to inform the base station of ", recited in paragraph 0112) to a managing node (fig.2, IP Base Station Manager, "base station node B, fig. 6, recited in paragraphs 0113-0115, "UMTS Service Information Base 18 serves as the resource information manager", recited in paragraph 0044,lines 1-4).

Regarding claims 22, **23**, Chen et al. discloses an apparatus (fig.1, Telecommunication Network System, recited in paragraph 0027, fig. 5 to fig. 6), comprising: determining means for determining information at a resource node (fig. 6, Resource Network Controller "determines Radio Base Station QoS parameters", recited in paragraph 0111); information passing means for passing the information between the resource node and a managing node ("the radio network controller sending radio link configuration prepare message to inform the base station of ", recited in paragraph 0112); and selecting means for selecting at least one parameter ("selecting the accessible RAB/Radio Access Bearer associated with configurable parameter", recited in paragraph 0108, Dynamic selection based on SLA QoS/service requirements", recited in paragraph 0011) for a new traffic flow ("conventional bearer, streaming, interactive", recited in paragraphs 0054-0058) based on said information ("set up the transport bearer for the user traffic on Iub interface", recited in paragraph 0114).

Regarding claim 24, Chen et al. discloses an apparatus (fig.1, Telecommunication Network System, recited in paragraph 0027, fig. 5 to fig. 6), comprising: communicating means for communicating ("the radio network controller sends a radio bearer set up message to the user equipment", recited in paragraph 0116) with a user equipment (fig. 5, Mobile Station, fig. 6, User Equipment); information determining means for determining information (fig. 6, Resource Network Controller "determines Radio Base Station QoS parameters", recited in paragraph 0111); and information passing means for passing said information ("the radio network controller sending radio link configuration prepare message to inform the base station of ", recited in paragraph 0112) to a managing node ("base station node B, fig. 6, recited in paragraphs 0113-0115).

Regarding claim 25, Chen et al. discloses an apparatus (fig.1, Telecommunication Network System, recited in paragraph 0027, fig. 5 to fig. 6) wherein said information comprises negotiation information and said negotiation information is determined by the resource node (see, SLA negotiation and assignment", recited in paragraphs 0077-0084).

Regarding claim 26, Chen et al. discloses an apparatus (fig.1, Telecommunication Network System, recited in paragraph 0027, fig. 5 to fig. 6) wherein said parameter is at least one of the following, traffic handling class ("QoS policy decisions based on traffic handling", recited in paragraph 0041), cost ("the corresponding cost", recited in paragraph 0035) and target bit rate ("data rates during

call set up", recited in paragraph 0031).

Regarding claim 27, Chen et al. discloses an apparatus (fig.1, Telecommunication Network System, recited in paragraph 0027, fig. 5 to fig. 6) wherein the resource node comprises an access node which is configured to communicate ("the radio network controller sends a radio bearer set up message to the user equipment", recited in paragraph 0116) with user equipment (fig. 5, Mobile Station, fig. 6, User Equipment).

Regarding claim 28, Chen et al. discloses an apparatus (fig.1, Telecommunication Network System, recited in paragraph 0027, fig. 5 to fig. 6), wherein the access node is a base station or radio network controller (fig. 6, Radio Access Bearer, the Radio Network Controller initiates policy-enabled", recited in paragraphs 0091-0092).

Regarding claim 29, Chen et al. discloses an apparatus (fig.1, Telecommunication Network System, recited in paragraph 0027, fig. 5 to fig. 6) wherein said resource node is an access node ("Radio Network Controller identifying the Radio Access Bearer for service requests", recited in paragraph 0110).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over Arunachalam et al (US 6,631,122 B1) in view of Parks et al (US 6,959,001 B1).

Arunachalam et al. teaches all the subject matter of the claimed invention with the exception of being silent with regard to the claimed features: a system, wherein an access charge for the user equipment is dependent on the location of the user equipment in the system and/or time.

However, Parks et al. from the same similar field of endeavor teaches a system (fig. 1, end users 105, recited in column 2, lines 5-13) wherein an access charge ("rate or tariff charged", recited in column 1, lines 36-44) for the user equipment (fig. 1, end users 105, recited in column 2, lines 5-13) is dependent on the location ("geographical distance", recited in column 2, lines 22-32) of the user equipment ("customer equipment and point of presence", recited in column 2, lines 18-22) in the system (fig. 1, end users 105, recited in column 2, lines 5-13) time ("charge based on time", recited in column 3,

lines 15-21). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the features of Arunachalam et al. by using features as taught by Parks et al. in order to charge the customer based on the distance (See Parks, column 1, lines 46-50 for motivation).

8. **Claims 11, 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Arunachalam et al (US 6,631,122 B1) in view of Chen et al (US 2003/0009580 A1).

Arunachalam et al. discloses the system as described in above paragraph. Arunachalam et al. is silent with regard to the claimed features: **regarding claim 11**, wherein the managing node comprises a gateway general packet radio service (GPRS) support node; **regarding claim 16**, wherein communication between the managing node and resource node is via a general packet radio service (GPRS) tunneling protocol or a multi-protocol label switching protocol.

Chen et al from the same field of endeavor discloses the above claimed features: **regarding claim 11**, wherein the managing node ("GGSN performs admission control admission control via the UMTS base station manager", recited in paragraph 0098) comprises a gateway general packet radio service (GPRS) support node (fig. 5, 3G-GGSN, recited in paragraph 0097); **regarding claim 16**, wherein communication between the managing node (fig. 5, 3G-GGSN, recited in paragraph 0097) and resource node (fig. 5, 3G-SGSN) is via a general packet radio service (GPRS) tunneling protocol ("SGSN and GGSN performs and admission/capacity control and configure the core network resources as the establishment of GPRS tunneling protocol GPT-(U&C)",

recited in paragraph 0098). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the features of Arunachalam et al. by using features as taught by Chen et al. in order to provide flow control of data stream from the user's terminal to another network node with quality of service (See paragraph 0008 for motivation).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Agin et al (US 6,996,401 B2), Li et al (US 6,728,365 B1) are cited to show method s and systems that are related to claimed invention.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CANDAL ELPENORD whose telephone number is (571)270-3123. The examiner can normally be reached on Monday through Friday 7:30AM to 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Bin Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Candal Elpenord/
Examiner, Art Unit 2616

/Kwang B. Yao/
Supervisory Patent Examiner, Art Unit 2616